

Tilburg University

Transaction, interaction, institutionalization

Noorderhaven, N.G.

Published in:
Scandinavian Journal of Management

Publication date:
1995

[Link to publication in Tilburg University Research Portal](#)

Citation for published version (APA):
Noorderhaven, N. G. (1995). Transaction, interaction, institutionalization: Toward a dynamic theory of hybrid governance. *Scandinavian Journal of Management*, 11(1), 43-55.

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.



TRANSACTION, INTERACTION, INSTITUTIONALIZATION: TOWARD A DYNAMIC THEORY OF HYBRID GOVERNANCE*

NIELS G. NOORDERHAVEN

*Tilburg University, Department of Business Administration and Center for Economic
Research, The Netherlands*

(First received January 1994; accepted in revised form August 1994)

Abstract — Intensive long-term customer–supplier relations, or hybrids, are becoming a prevalent feature of more and more industrial markets. Received transaction cost economics and the interaction approach developed in the context of the International Marketing and Purchasing projects give different (arguably: complementary) accounts of the mechanisms underlying hybrids and the factors leading to their formation. A model integrating elements of both approaches is developed. The model is dynamic in that it consists in propositions regarding the occurrence of shifts from one form of governance to another.

Key words: Transaction cost economics, interaction approach, institutionalization, hybrid governance, customer–supplier relations.

INTRODUCTION

A form of industrial organization becoming more and more prevalent and receiving growing academic attention over the last two decades is that of intensive long-term customer–supplier relations in industrial markets (e.g. Dwyer *et al.*, 1987; Lyons *et al.*, 1990; Powell, 1987; Ring and Van de Ven, 1992, 1994; Semlinger, 1991). While the firms engaged in these relationships formally remain independent, they cooperate in ways not easily reconciled with the conventional concept of arm's-length market interaction. This cooperation often comprises areas like production, logistics, quality assurance, and research and development. Not seldom the buying firm relies on a supplier as the sole source of a given input, and the supplier realizes a substantial part of its sales with a single client. Also not infrequently one of the parties incurs considerable investments in time and money without any formal guarantee for continued business. This is often true, for instance, for suppliers engaging in cooperative development efforts with their clients. Almost inevitably mutual or unilateral adaptations of processes and equipment are implemented, adaptations that only pay off if the relationship continues.

These intensive long-term customer–supplier relationships are often referred to as *hybrids*, because they seem to combine characteristics of hierarchical governance with characteristics of market governance, as far as duration, adjustment mechanisms, and the nature of commitments are concerned (Noorderhaven, 1994; Williamson, 1991a). The boundaries of the concept of

*This paper is a product of a project sponsored by the Economics Research Foundation, which is part of The Netherlands' Organization for Scientific Research (NWO). Valuable comments made by Paul de Laat, Peter Smith Ring, and three anonymous reviewers are gratefully acknowledged. The author is responsible for any remaining errors.

hybrid governance are often drawn wider, to include such disparate organizational forms as joint ventures (Kogut, 1988), strategic alliances (Borys and Jemison, 1989), and interorganizational networks (Jarillo, 1988). Obviously, it would be a gross simplification to group all these phenomena within a single category. It also is an open question whether hybrids are adequately characterized as intermediate forms between the end-points of market and hierarchy, or must be assumed to form a separate basic type in their own right (Alvesson and Lindkvist, 1993; Bradach and Eccles, 1989; Larsson, 1993).

In this paper I will not focus on the general question of the conceptualization of hybrid governance, but rather concentrate on the more specific phenomenon of intensive long-term buyer-seller relationships in industry, and on two related questions in this context. The first of these questions pertains to the mechanisms endorsing commitments in the class of hybrid relations scrutinized in this paper, compared to those operative in market relations. Market relations are assumed to be disciplined by the forces of competition, a firm not living up to its commitments will soon be out of business. The first question now is: what is the equivalent mechanism endorsing commitments in the context of hybrids? The second question concerns the dynamics of governance: how to explain shifts from the market to hybrid governance and vice versa?

The first question is important because the mechanism endorsing (mutual) commitment can be seen as the "glue" that keeps the parties to a transaction relationship together. Unless we understand the nature of this "glue", we cannot understand the transaction relationship. The second question is important because real-world transaction relations are ever-changing. The explanation of shifts from one governance form to another forms an essential part of a theory of transaction relations. The two questions are interrelated because the limitations of the various mechanisms endorsing commitments will presumably be a major cause of changes in governance forms.

This paper is prompted by dissatisfaction with the answers to these questions provided by an influential school of thought, viz. *transaction cost economics* (TCE), as initiated by Coase (1937) and developed by Williamson (1975, 1985, 1991a). This dissatisfaction in turn has been fuelled by the findings of the empirical investigations associated with the *interaction approach*. The interaction approach (IA) has been developed in the context of the International Marketing and Purchasing projects, conducted by teams of researchers from various European countries with, as their focal point, Uppsala University in Sweden (see, e.g. Håkansson, 1987, 1989; Håkansson and Johanson, 1992, 1993; Hallén, 1982; Hallén *et al.*, 1991).

Transaction cost theory is taken as a point of departure in the discussion contained in this paper. I use elements of IA and observations stemming from the associated empirical work in order to infuse TCE with more realism, and to make the theory more dynamic. The resulting model integrates elements of both approaches, but in its emphasis on the possibility of opportunistic behaviour and the importance of safeguards it is probably much closer to the core of TCE than to that of IA. Nevertheless, it may provide some middle ground to two schools of thought that as yet have not established much rapport (cf. Hallén, 1982; Johanson and Mattson, 1987; Nooteboom, 1994).

The paper proceeds as follows: first the position of TCE with regard to hybrid governance is dealt with. After that IA is discussed, and the differences and similarities between IA and TCE are examined. These differences and similarities are subsequently shown to be closely associated with the assumptions pertaining to rationality and human motivation maintained by both schools of thought. The next section focuses on the rationality issue, and establishes a link to neo-institutionalist theory. Subsequently the outlines of a dynamic model of hybrid governance, integrating insights from TCE and IA, are sketched. Concluding remarks follow.

TCE AND HYBRID GOVERNANCE

In his early versions of TCE Williamson failed to recognize the viability of intermediate governance forms, but in later work this has been rectified. The occurrence of hybrids is explained in TCE on the basis of comparative production and transaction costs. Hybrid governance is likely to arise if economies can be realized through the use of a production technology specific to a particular group of clients. Consider for example a supplier producing body parts for the automobile industry. The press used for stamping body parts is not specific to one particular client, but, assuming it can only be used to produce these body parts, it *is* specific to a small group of clients. The press is used in conjunction with dies which are specific to particular clients. The independent supplier has a potential production cost advantage, assuming that it can through the aggregation of demand achieve economies of scale inaccessible to the client firms (Williamson, 1975, pp. 16–19, 1985, p. 116). However, if the independent supplier would keep its clients at arm's length, investment in the press would be risky. The client firms may act opportunistically, and force down the price knowing that the supplier has no alternative use for the press. This causes transaction costs to be high. A possible solution would be to let the client firms pay for dies specific to the press owned by the supplier. Now both parties have a stake in the relationship, which has acquired the identity of a particular type of hybrid, viz. quasi-integration (Masten, 1984; Monteverde and Teece, 1982; Palay, 1984).

With regard to the first question raised above the answer of received TCE is that the risks associated with the adaptation, specific investments, etc. that come with hybrid relations call for safeguards. These safeguards can take two forms: legal ordering and private ordering. In the case of legal ordering the parties draw up a formal contract, covering as many of the aspects of the relationship as feasible, and often of a very long duration (Goldberg and Erickson, 1987; Joskow, 1985, 1987, 1988; Mulherin, 1986). Market governance is in principle also buttressed by contract law, but recourse to the judiciary is not a part of the normal expectations but rather is used only in the last resort. Consequently, contracts tend to be rudimentary or even nonexistent in market deals (Macaulay, 1963). In the case of private ordering the relationship is designed to achieve a balance of mutual dependency. Williamson (1983, 1985) proposes the use of "hostages" (in the metaphorical sense of the word) as the chief expedient for the achievement of a balance of mutual dependency. The investment in a die specific to the supplier's press, incurred by the client firms in the example above, is an example of the economic equivalent of a hostage.

The answer of received TCE to the second question is that economic agents deliberately craft relationships on the basis of considerations of production and transaction costs (Williamson, 1985, p. 106, 1991b). Reduced to its essence, TCE is a two-period model: in the first period the relevant decisions with regard to investments and governance structure are made; in the second period the actual transactions follow. TCE is geared to the comparative static analysis of governance structures, and offers very little in the way of a theory of gradual change from one governance structure to the other.

IA AND HYBRID GOVERNANCE

TCE can be characterized as a deductive theory, starting from clearly stated simplifying assumptions and working towards refutable propositions that are subsequently confronted with selected slices of reality. IA works from the opposite side, assimilating with managerial practice and through induction identifying regularities in interfirm relations. In contrast to the quantified

data used in most empirical tests of TCE, the data produced by IA-related research are mostly of a qualitative nature. This, however, does not mean that they should be taken less seriously, the more so since some of the observations made in IA studies unexpectedly resound in the conclusions of TCE-related surveys (cf. Noorderhaven, 1994).

A preliminary point that has to be dealt with before the position of IA *vis-à-vis* hybrid inter-firm relations can be discussed is the question whether IA really relates to hybrids as defined here. Ostensively, IA focuses on networks of actors in which a multitude of exchange processes take place. Thus, on the face of it IA applies a different level of analysis (Johanson and Mattsson, 1987). However, while the importance of wider networks is emphasized, at closer inspection much of the empirical work in IA appears to focus on dyadic exchange. In Håkansson (1989), for example, the research method consisted in interviews with focal firms that were asked to provide information about their relationships with important customers and suppliers. These relationships in many cases can be characterized as hybrids.

If we now look at the findings with regard to hybrid relations of IA studies the following observations are relevant. Firstly, *mutual adaptation* is seen as a crucial aspect of these relations. Intensive long-term customer-supplier relations reduce uncertainty, give access to scarce resources, and facilitate innovation and technological development (Håkansson, 1987, 1989; Håkansson and Johanson, 1992, 1993; Johanson and Mattsson, 1987). They can serve these functions so well because the parties adapt products, production processes, and innovation processes to the needs of their counterparts (Hallén, 1982, p. 20; Hallén *et al.*, 1991, p. 30). The concept of "adaptation" closely resembles TCE's "asset specificity".

Other observations made in the IA literature are less easily reconciled with TCE. For instance, the importance of the *history of the relationship* is repeatedly emphasized (e.g. Håkansson, 1989, pp. 24 and 126). Long-lived interfirm relations not only lead to mutual adaptation but also, through social exchange processes, to personalized relationships of friendship, trust, confidence, and liking (Håkansson, 1987, pp. 11 and 13; Håkansson and Johanson, 1993, pp. 22–23; Hallén, 1982, pp. 21 and 52; Johanson and Mattsson, 1987, p. 35). The time dimension is also relevant because learned behaviour is seen to play an important role in hybrid relations. The parties must learn to cooperate, rely on trust, and behave trustworthy *vis-à-vis* their counterpart (Håkansson and Johanson, 1993, p. 23). All this indicates that IA assumes, or infers from observed practice, a different model of human motivation than that employed in TCE. I will return to this point in the next section of this paper.

A related important difference between IA and TCE concerns the instrumentality of exchange relations. In TCE exchange relationships are considered to be purely instrumental. The possibility that the exchange relationship influences the goals of the parties is not contemplated. IA on the other hand also considers the possibility that the process of exchange and the characteristics of relationships with others may alter an actor's definition of his goals and his view of the means to achieve them (Håkansson, 1987, pp. 4 and 91). The very identity of an actor is seen as partly dependent upon his position in the network (Håkansson, 1989, p. 21; Nooteboom, 1994). This goes further than the insight that relationships, built up over a long period of time and at considerable cost, are large and important investments (Håkansson, 1987, p. 10). The social content of the relationship, consisting in bonds of friendship, mutual trust and confidence, goes beyond the instrumental reasoning of TCE (cf. Håkansson, 1987, p. 13).

But perhaps the most important difference between both schools of thought is that the safeguards which TCE considers the most important relationship characteristics (formal contracts and private ordering arrangements) are virtually neglected in IA. Safeguards are simply no element in the observation instrument and explanatory framework used in this approach (cf. Håkansson,

1989, p. 17). This lack of attention to safeguards could be construed as an omission of IA. It is, however, consistent with what appears to be the underlying model of human agents employed in IA. IA differs from TCE in the key concepts of opportunism and bounded rationality. I will now turn to a discussion of these assumptions.

OPPORTUNISM AND BOUNDED RATIONALITY ASSUMPTIONS

Two behavioural assumptions have an important place in TCE: opportunism and bounded rationality. Without either of the two, the problem of economic organization is seen as trivial. If actors are perfectly rational every conceivable transaction can be safeguarded by a complete contract. If there is no opportunism promises, good faith, and mutual adjustment can be used for coordination purposes. Safeguards are superfluous under these circumstances, and presuming they are costly, will be omitted. It is the combination of opportunism and bounded rationality that gives saliency to the choice of governance structure (Williamson, 1985).

Williamson does not assume that all individuals are opportunistic to the same degree: "some individuals are opportunistic some of the time and [...] differential trustworthiness is rarely transparent *ex ante*. As a consequence, *ex ante* screening efforts are made and *ex post* safeguards are created" (Williamson, 1985, p. 64). However, the main thrust of TCE is to explain *ex post* safeguards, the possibility of screening successfully for opportunism and consequently of being able to renounce from safeguards is hardly elaborated. In fact the only two allusions to screening in Williamson's *Economic Institutions of Capitalism* suggest that this remedy is impotent (Williamson, 1985, p. 58 and pp. 64–65). This concentration on safeguards and neglect of screening have the effect of suggesting that the condition of opportunism, notwithstanding Williamson's assertion to the contrary, is pervasive.

IA is more differentiating in its approach to human nature. At the same time, IA's position is not always completely clear. What, according to the proponents of IA, makes safeguards relatively unimportant? As we have seen above, factors like friendship, trust, confidence, and liking are alluded to at various places. On the other hand, altruism is explicitly dismissed as *the* explanatory factor for the importance of trust-based transaction relations (Håkansson and Johanson, 1993, p. 22).

Instead, trust is seen as based on 'enlightened self-interest'. Economic agents know that opportunistic behaviour in the present impedes profitable interactions in the future, and that their self-interest is best served by displaying trustworthiness (Håkansson and Johanson, 1993, p. 22). If both parties act in this way, a relationship can be based on "mutuality", i.e. "the belief that self-interest in the long run is best served by acknowledging and adapting to the interest of other actors" (Håkansson and Johanson, 1993, p. 22). It seems fair to reconstruct the position assumed in IA as to imply that safeguards are in many cases relatively unimportant because of a combination of emotional or normative constraints to opportunism and calculative considerations of enlightened self-interest. Parties to intensive long-term relations often do not want to behave opportunistically, and they also often think that doing so would go against their own interests. If both parties know that their counterpart perceives the relationship in this way, safeguards are superfluous.

The position *vis-à-vis* opportunism assumed by IA may be less clear than that of TCE, it also seems to be more in accordance with the world "as we know it". In conversations with businessmen the importance of trust is stressed time and again. Also some of the findings of empirical

studies in the vein of TCE suggest that trust is an important element of transaction relations (cf. Lorenz, 1988; Palay, 1984). TCE, given its assumption of opportunism, can incorporate a concept like trust only in a very marginal way. Only if I know that the other acts in his own best interest by living up to his commitments, and if I also know that he knows this, can I rely on "trust" and abstain from safeguards. This kind of trust could be described as "confident expectation". But the first meaning of "trust", according to the *Concise Oxford Dictionary of Current English*, is the "firm belief in reliability, honesty, veracity, justice, strength, etc., of person or thing". There is little doubt that humans vary in their moral character. Experiments confirm the existence of differences in the tendency to behave opportunistically (Etzioni, 1988, pp. 51–66; Frank, 1988, pp. 137–143; Kahneman *et al.*, 1986). These differences, and their implications for transaction relations, are not acknowledged by received TCE.

TCE may be criticized that the relentless opportunism its actors are assumed to display also undermines the proposed solutions to the problem of economic organization. For instance, it is difficult to understand how a system of contract law could arise or survive in a world of pure opportunists (Noorderhaven, 1992). Also, Williamson at times appears to smuggle in arguments that contaminate the purity of opportunism. Thus, in his discussion of managerial hierarchies he mentions "consummate cooperation" as one of the potential advantages of hierarchies over markets. However, no consummate cooperation is to be expected from an opportunistic agent (Noorderhaven, 1995).

As far as human information processing capacity is concerned, IA and TCE both utilize an assumption of "bounded rationality". But the implications for exchange relations emphasized by the two approaches are very different. In TCE bounded rationality is associated with the inability to write complete contingent contracts, as well as with the imperfection of enforcement procedures (Williamson, 1985, p. 50). This is one of the reasons why markets under specified circumstances give way to internal organization. IA sees bounded rationality as the main reason why firms have to cooperate in order to be effective. Effective operation and innovation can only succeed if the knowledge and perspective of various actors are combined. As a consequence, IA concentrates on the actual processes of cooperation and adaptation, while TCE focuses on the governance structures within which these processes take place (Nooteboom, 1994).

A closer look at TCE shows that, bounded rationality notwithstanding, intentionality of human agents is assumed throughout (cf. Williamson, 1991b). The "strong commitment to intended rationality" in TCE, the "semi-farsightedness" imputed to economic agents, and the focus on the question of "how [...] parties organize so as to utilize their limited competence to best advantage" corroborate this view (Williamson, 1985, pp. 46, 387 and 392). Furthermore, "the ramifications of alternative contracts are intuited if not fully thought through" (Williamson, 1985, p. 38). This statement appears to imply that bounded rationality, although causing imperfections in governance structures, does not seriously stand in the way of a deliberate choice between these (imperfect) governance structures.

However, if the assumption of bounded rationality is taken on board, we should also consider in which way limitations to human information processing capacity may influence decision making with regard to the choice between governance structures. Bounded rationality implies that decision makers use cognitive simplifications in order to reduce the complexity of problems that would otherwise overwhelm them (Hogarth, 1980). One such simplifying heuristic is that of *focusing*: in order to be effective human decision makers have to concentrate their scarce attention and cognitive resources on a limited number of problems (Berger *et al.*, 1993; Legrenzi *et al.*, 1993). This means that the decision makers in a firm at any given moment will be receptive to information concerning only a fraction of all of the firm's operations, and hence also focus

only on a small number of its transaction relations. Presumably this will only be transaction relations in which important changes occur or appear to be imminent.

This means that there will be limited attention to the major part of the transaction relations. These will be dealt with on the basis of standard operating procedures and organizational routines (Cyert and March, 1963; March and Simon, 1993). Put differently: the accompanying patterns of behaviour have become “institutionalized”.

INSTITUTIONALIZATION

“Institutionalized behaviour”, as seen in this paper, consists in standardized interaction sequences supported and sustained by routine, taken-for-granted reproductive procedures (cf. Jepperson, 1991, p. 145). Institutionalized behaviour, in as far as consisting in repeated interaction sequences, is associated with habituation as described by Berger and Luckmann (1966, pp. 53–54). Habituation leads to parallel expectations, reduces uncertainty, and provides a psychic relief for boundedly rational actors. IA clearly acknowledges this aspect of long-term customer–supplier relations (Håkansson, 1987, p. 16). Institutionalized behaviour is of a routine, taken-for-granted nature because these behavioural patterns are performed in an unreflective way. This is caused by the fact that the perspectives and indeed the preferences of individual actors are influenced by institutional forces. This aspect of institutionalization is also to be found in IA (Håkansson, 1987, p. 91).

Institutionalized behaviour by its very nature is shielded from the rational pursuit of self-interest: routinized rule-following behaviour is substituted for rational calculative decision making. Thus institutionalization provides a possible explanation of restraint from opportunism. If interaction patterns in the context of a transaction relation between firms institutionalize, they shift out of the focus of rational deliberation. This means that opportunistic behaviour (which is very calculative) is neither considered by either party nor expected from the other. Consequently, safeguards are no issue, and stability reigns. This inference is consistent with case studies bearing out the strong tendency of industrial buyers to persist in the use of existing suppliers (Woodside and Möller, 1992).

Adoption of the assumption that transaction behaviour can be subject to institutionalization as described above constitutes a marked break with received TCE. The choice between governance structures like market agreements, more complicated contractual arrangements, or hierarchical organization can be seen as a choice between different institutional arrangements. But in received TCE the emphasis is very much on deliberate choice, and not on institutionalization as conceived in this paper, which substitutes routines for rational deliberations (cf. Williamson, 1991b).

Incorporation of the concept of “institutionalization” into a theory emphasizing rational choice may seem paradoxical, as institutionalist and rational choice theory are sometimes seen as mutual exclusive paradigms. This is by no means a necessity, however. Rational choice explanations often feature institutional constraints, and institutionalist accounts often invoke rational adaptations to institutional conditions (Jepperson, 1991, p. 157).

A DYNAMIC MODEL OF HYBRID INTERFIRM RELATIONS

Now a dynamic model of hybrid interfirm relations integrating elements of IA and TCE can be built up.

Joint technological development forms an important aspect of long-term customer–supplier relations in IA. Two overall patterns can be distinguished: step-by-step and leapwise technological development. Leapwise development is associated with radically new products and major investments; step-by-step development with a continuous stream of minor technological improvements (Håkansson, 1989, pp. 38–41). In both cases cooperation between firms is important, but whereas gradual changes in the relationship typify the latter case, leapwise development brings about a fundamental change in the relative positions.

In terms of the institutional theory described in the preceding section, the time-consuming process of step-by-step development will arguably be accompanied by institutionalization of interaction patterns. In the absence of major events or milestones, the scarce attention of decision makers will be diverted to other areas, and the relationship will be governed largely by routines and procedures. Leapwise development, to the contrary, will often rupture existing institutionalized ties. A radically new situation presents itself, demanding the focus of managerial attention. Thus one of the two kinds of joint technological development distinguished by IA can be associated with high, the other with low levels of institutionalization.

Turning now to TCE, the notion that investment in relation-specific assets may lead to dependence, and that this dependence may be misused, has a central place in this approach (Nooteboom, 1993). A basic assumption underlying TCE is that if an agent perceives himself to be vulnerable he will act in such a way as to protect himself. That is, the possibility that an agent knowingly enters into a relationship of unilateral dependence without asking for adequate safeguards is ruled out. In the proposed model the link between asset specificity, dependency, and safeguards is adopted from TCE, with one important proviso: asset specificity leads to safeguards only if the dependent party is aware of its dependency and the concomitant risks. If the relationship in question is highly institutionalized, this will presumably not be the case.

Of the four types of asset specificity distinguished in TCE one, human asset specificity, is clearly associated with step-by-step development. Human asset specificity consists largely in tacit knowledge and learning-by-doing that can only accumulate over time (Williamson, 1979). The other forms of asset specificity — location specificity, physical asset specificity and investments in dedicated assets — are of a more discrete nature and are more likely to be the result of conscious investment decisions. These kinds of asset specificity bear resemblance to the category of leapwise developments distinguished in IA.

Following the argumentation unfolded above, human asset specificity can be associated with high, and the other forms of asset specificity with low levels of institutionalization of interfirm relations. This means that in case of human asset specificity, built up gradually over time, the need for safeguards will not be felt. The other types of asset specificity, arising more instantaneous as the result of deliberate investment decisions, will draw the focus of managerial attention, and thus set in motion the deliberations that lead to the installation of safeguards.

In a schematic form, three ideal types of interfirm relations can be discerned (in case of internalization an interfirm relation no longer can be said to exist, therefore hierarchical governance is not included in the model): market governance, hybrid governance with safeguards, and hybrid governance without safeguards. In case of market governance asset specificity is low, and mutual adaptation very restricted. Elaborate safeguards are not necessary, as the parties remain relatively independent. In many market relations a contract in the legal sense of the word cannot even be said to exist, since there is an insufficient clear “meeting of the minds” (Macaulay, 1963). If (technological) developments change the situation, the parties can simply alter the terms of the relationship, or shift to other partners.

Hybrid governance *with* safeguards corresponds to bilateral and trilateral governance as

described by Williamson (1985, 1991a). These relationships are characterized by high levels of asset specificity and mutual adaptation, and by safeguards installed in order to neutralize the perceived concomitant risks. These safeguards can take the form of complex contracts, specifying arrangements for price and quantity adjustments and providing for third-party arbitration (see, e.g. Joskow, 1985). Alternatively, the parties can make use of private ordering arrangements, e.g. in the form of joint ownership of, or symmetrical investments in relation-specific assets (cf. De Laet, 1994; Masten, 1984).

Hybrid governance *without* safeguards corresponds to a third type of transaction relations, arguably not on Williamson's continuum between market and hierarchy. This type of hybrid has been referred to as "trust relations" (Bradach and Eccles, 1989), "relational contracts" (Macneil, 1974), "contracting in the state of union" (Kronman, 1985), and "cooperative interorganizational relationships" (Ring and Van de Ven, 1994). This ideal type also seems to correspond to the view of long-term customer-supplier relations maintained in IA. The absence of safeguards is here assumed to be caused by institutionalization: the more dependent party may not even be aware of asset specificity or adaptation, and if he is, he nevertheless does not perceive himself to be in a vulnerable position. Note that hybrid relations as described above by definition imply asset specificity/adaptation.

The dynamic nature of the proposed model is embodied in propositions concerning shifts from one ideal type to another. Six kinds of governance shifts can be distinguished (see Fig. 1).

Starting from market governance, two governance shifts are possible: to hybrid governance with and without safeguards (arrows 1 and 2 in Fig. 1). The argumentation contained in this paper suggests that the first kind of shift is associated with a rapid build-up of physical asset specificity, location specificity, or dedicated assets. For example: a supplier formerly producing inputs for a client using standard machinery is asked to invest in specialized equipment, to move his production facilities to a location adjacent to the client, or to substantially expand his facilities especially for that client. The logic of TCE, adopted here, predicts that the supplier will demand adequate safeguards of the legal or private ordering type.

The second kind of shift (arrow 2) is associated with the gradual build-up of human asset speci-

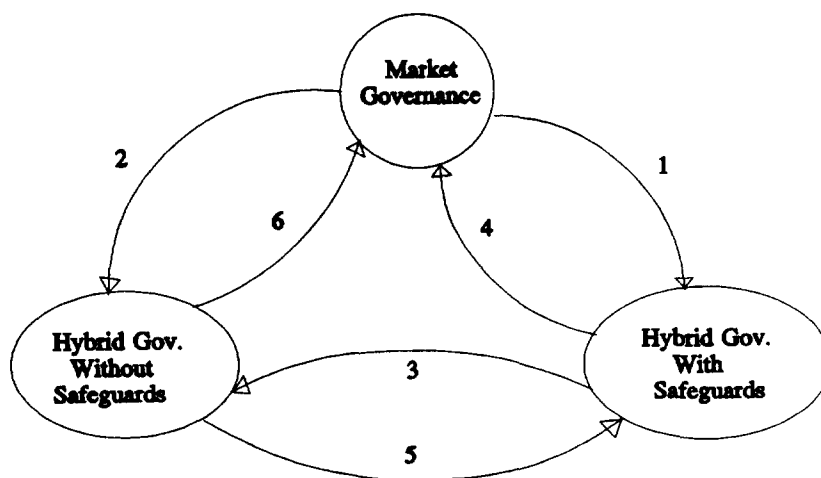


Fig. 1. A dynamic model of transaction relations.

ficity: time is invested to acquire new skills by learning-by-doing, etc. This is not the kind of investment process that draws attention, hence the demand for safeguards is less likely. Furthermore during the time it takes to develop this kind of asset specificity the relationship is subject to a gradual process of institutionalization which also makes a call for safeguards less likely. These expectations are capsulized in two propositions (all propositions are subject to the *ceteris paribus* condition):

Proposition 1: Rapid build-up of physical asset specificity, location specificity, or dedicated assets leads to hybrid governance with safeguards.

Proposition 2: Gradual build-up of human asset specificity leads to hybrid governance without safeguards.

From hybrid governance with safeguards shifts to market governance and to hybrid governance without safeguards are possible. A shift to hybrid governance without safeguards (arrow 3) may be the result of the passage of time. Safeguards that have once been installed may be subject to erosion, e.g. because contract clauses are not adjusted to reflect changing circumstances, or because the value of collaterals is not adjusted to increased volumes of trade. The omission of safeguard maintenance is consistent with the model of institutionalization: with the passage of time the interaction becomes routinized and risks associated with asset specificity are given less attention. The result is a shift to hybrid governance without safeguards. The phrasing “without safeguards” should not be taken too literally in this context. Safeguards may still be present, but they no longer reflect the current situation and hence are inadequate.

A shift from hybrid governance with safeguards to market governance (arrow 4) can be induced by technological development. The introduction of industrial robots, for instance, enables suppliers to some extent to produce customized components with general-purpose technology (Benders, 1993). This is an example of leapwise technological development leading to accelerated depreciation of the relation-specific assets. The result is that safeguards are no longer needed, and ordinary market relations can prevail. Furthermore, progressive standardization of products and components is a normal feature of the lifecycle of industries. Thus, where strong ties with specialized suppliers may be a necessity in the embryonic phase of an industry, at later stages efficient markets for inputs are more likely to develop. This leads to the following two propositions:

Proposition 3: In hybrid relations with safeguards the passage of time (without important new investments in relation-specific assets) leads to a shift to hybrid governance without safeguards.

Proposition 4: Leapwise technological development and maturation of the industry leading to obsolescence of relation-specific assets cause a shift to market governance.

From hybrid governance without safeguards a shift to hybrid governance with safeguards (arrow 5) can be expected in case of leapwise (joint) technological development, or if important investments of the non-human type take place in the context of a relationship hitherto characterized by step-by-step development and institutionalization. According to Håkansson (1989, p. 40) leapwise developments are often preceded by a number of smaller steps, to find out if a new path is practicable. The final leap will according to the logic of the proposed model be accompanied by the deliberate design of safeguards. Alternatively, the shift of hybrid governance *without* to hybrid governance *with* safeguards may be the result of a breach of trust. In this case the long-

term relationship may nevertheless be continued (the acquired human asset specificity still has value), but now as a stable relationship of mutual distrust, governed by safeguards (cf. Heide and Miner, 1992).

Finally, a shift from hybrid governance without safeguards to market governance (arrow 6) results if the know-how that once was specific to the relationship becomes widespread. This is a not unusual effect of the maturation of a technology or industry. Proprietary knowledge is subject to leakage, and tacit know-how over time may become codified (Boisot, 1986). As a consequence, efficient markets for inputs develop, and the reasons for sticking to one particular transaction partner dissipate. The last two propositions, then, are as follows:

Proposition 5: Leapwise technological development, important investments in relation-specific assets of the non-human kind, and breach of trust lead to a shift from hybrid governance without, to hybrid governance with safeguards.

Proposition 6: Dissemination of formerly relation-specific knowledge (human asset specificity) leads to a shift to market governance.

CONCLUDING REMARKS

If the premise is accepted that both TCE and IA have something to say about intensive, long-term buyer–seller relationships in industry, it is worthwhile investigating the possibility of constructing a model integrating at least parts of these two approaches. Granted, the model sketched above is overly schematic, and the propositions are formulated too broadly to permit direct testing. But the model has several advantages compared to those of IA and TCE. It is more dynamic than that of TCE, takes more seriously the boundaries to human rationality, and is more differentiated in the assumption concerning opportunism. Compared to IA, the model explicitly takes into account the risks associated with asset specificity and adaptation, and includes propositions with regard to the use of safeguards. Furthermore, the propositions can be made more specific and confronted with empirical evidence. Given the dynamic nature of the model, this evidence will have to be of the longitudinal kind; the cross-sectional design used in most empirical work in the TCE tradition will not do.

Difficulties in the operationalization and measurement are to be expected, but these problems do not appear to be unsurmountable. Operationalizations and measures of the various kinds of asset specificity and safeguards can be found in the literature (for overviews of empirical work see, e.g. Anderson, 1994 and Masten, 1994).

On the basis of measurements of asset specificity and safeguards, transaction relations can be categorized as market relations or one of the two kinds of hybrids. This is by no means an easy task. Real-world transaction relations are always mixtures of the various ideal types. However, categorization is feasible if we focus on comparative dynamics. The crucial question is not whether a given transaction relation at a given moment looks more like a market relation or like a hybrid with safeguards; but rather whether a shift in the direction of one of the ideal types actually coincides with the conditions specified by the various propositions. Thus, if substantial investments in relation-specific physical assets are *not* accompanied by the installation of safeguards this would constitute a refutation of the proposed model.

In principle, the model can be tested without operationalizing the concept of institutionalization. If a high level of (human) asset specificity is not accompanied by safeguards, institutional-

ization of the relationship may be assumed. However, the explanation becomes considerably stronger if institutionalization can be measured directly. This could conceivably be done by asking managers point-blank whether they consciously deliberate about the governance of this or that relationship. This method of measurement can hardly be called unobtrusive, though. In a longitudinal study the subjects would be unduly influenced by this kind of questions. A more indirect approach, consisting in observation, or unobtrusive questions regarding procedures and routines, would be preferable. Clearly important difficulties still have to be solved particularly with regard to this aspect of the proposed model.

REFERENCES

- Alvesson, M. and Lindkvist, L., Transaction costs, clans and corporate culture, *Journal of Management Studies* (1993), pp. 427–452.
- Anderson, E., *Transaction cost analysis and marketing*, paper for the conference on Transaction Cost Economics and Beyond (Rotterdam: Erasmus University, 1994).
- Benders, J., *Optional Options: Work Design and Manufacturing Automation* (Aldershot: Avebury, 1993).
- Berger, J., Noorderhaven, N. G., Nooteboom, B. and Pennink, B. J., Understanding the subcontracting relationship: The limitations of transaction cost economics. In: J. Child, M. Crozier and R. Mayntz *et al.* (Eds), *Societal Change Between Market and Organization* (Aldershot: Avebury, 1993), pp. 77–98.
- Berger, P. L. and Luckmann, T., *The Social Construction of Reality* (Garden City, NJ: Doubleday, 1966).
- Boisot, M. H., Markets and hierarchies in a cultural perspective, *Organization Studies* (1986), pp. 135–158.
- Borys, B. and Jemison, D. B., Hybrid arrangements as strategic alliances: Theoretical issues in organizational combinations, *Academy of Management Review* (1989), pp. 234–249.
- Bradach, J. L. and Eccles, R. G., Price, authority and trust: From ideal types to plural forms, *Annual Review of Sociology* (1989), pp. 97–118.
- Coase, R., The nature of the firm, *Economica N.S.* (1937), pp. 386–405.
- Cyert, R.M. and March, J.G., *A Behavioral Theory of the Firm* (Englewood Cliffs, NJ: Prentice Hall, 1963).
- De Laat, P., Technological alliances: Securing trust by mutual commitments, Proceedings of the ESF conference on Inter-Organizational Networks: Structures and Processes (Berlin, 1994), pp. 435–464.
- Dwyer, F.R., Schurr, P.H. and Oh, S., Developing buyer–seller relationships, *Journal of Marketing* (1987), April, pp. 11–27.
- Etzioni, A., *The Moral Dimension: Towards a New Economics* (New York: Free Press, 1988).
- Frank, R.H., *Passions Within Reason: The Strategic Role of the Emotions* (New York: Norton & Company, 1988).
- Goldberg, V. and Erickson, J. R., Quantity and price adjustment in long-term contracts: A case study of petroleum coke, *Journal of Law and Economics* (1987), pp. 369–398.
- Håkansson, H. (Ed.), *Industrial Technological Development: A Network Approach* (Beckenham: Croom Helm, 1987).
- Håkansson, H., *Corporate Technological Behaviour: Co-operation and Networks* (London: Routledge, 1989).
- Håkansson, H. and Johanson, J., A model of industrial networks. In: B. Axelsson and G. Easton (Eds), *Industrial Networks: A New View of Reality* (London: Routledge, 1992), pp. 28–34.
- Håkansson, H. and Johanson, J., Industrial functions of business relations. In: G. Grabher (Ed.), *The Embedded Firm* (London: Routledge, 1993), pp. 15–31.
- Hallén, L., *International Industrial Purchasing: Channels, Interaction, and Governance Structures* (Uppsala: Acta Universitatis Upsaliensis, 1982).
- Hallén, L., Johanson, J. and Seyed-Mohamed, N., Interfirm adaptation in business relationships, *Journal of Marketing* (1991), pp. 29–37.
- Heide, J. B. and Miner, A. S., The shadow of the future: Effects of anticipated interaction and frequency of contact on buyer–seller cooperation, *Academy of Management Journal* (1992), pp. 265–291.
- Hogarth, R. M., *Judgement and Choice: The Psychology of Decisions* (Chichester: Wiley, 1980).
- Jarillo, J. C., On strategic networks, *Strategic Management Journal* (1988), pp. 31–41.
- Jepperson, R. L., Institutions, institutional effects, and institutionalism. In: W. W. Powel and P. J. DiMaggio (Eds), *The New Institutionalism in Organizational Analysis* (Chicago: University of Chicago Press, 1991), pp. 143–163.
- Johanson, J. and Mattsson, L.-G., Interorganizational relations in industrial systems: A network approach compared with the transaction-cost approach, *International Studies of Management & Organization* (1987), pp. 34–48.
- Joskow, P. L., Vertical integration and long term contracts: The case of coal-burning electric generating plants, *Journal of Law, Economics, and Organization* (1985), pp. 33–80.
- Joskow, P. L., Contract duration and relation-specific investments: Empirical evidence from coal markets, *American Economic Review* (1987), pp. 168–185.

- Joskow, P. L., Price adjustment in long-term contracts: The case of coal, *Journal of Law and Economics* (1988), pp. 47–83.
- Kahneman, D., Knetsch, J. L. and Thaler, R. H., Fairness and the assumptions of economics, *Journal of Business* (1986), pp. s285–s300.
- Kogut, B., Joint ventures: Theoretical and empirical perspectives, *Strategic Management Journal* (1988), pp. 319–332.
- Kronman, A. T., Contract law and the state of nature, *Journal of Law, Economics, and Organization* (1985), pp. 5–32.
- Larsson, R., The handshake between invisible and visible hands, *International Studies of Management & Organization* (1993), pp. 87–106.
- Legrenzi, P., Girotto, V. and Johnson-Laird, P. N., Focusing in reasoning and decision making, *Cognition* (1993), pp. 37–66.
- Lorenz, E. H., Neither friends nor strangers: Informal networks of subcontracting in French industry. In: D. Gambetta (Ed.), *Trust: Making and Braking Cooperative Relations* (Oxford: Basil Blackwell, 1988), pp. 194–210.
- Lyons, T. F., Krachenberg, A. R. and Henke, J. W., Jr., Mixed-motive marriages: What's next for buyer–seller relations?, *Sloan Management Review* (1990), pp. 29–36.
- Macaulay, S., Non-contractual relations in business: A preliminary study, *American Sociological Review* (1963), pp. 55–70.
- Macneil, I. R., The many futures of contract, *Southern California Law Review* (1974), pp. 691–816.
- March, J. G. and Simon, H. A., *Organizations*, second edition (Cambridge, MA: Blackwell, 1993).
- Masten, S. E., The organization of production: Evidence from the aerospace industry, *Journal of Law and Economics* (1984), pp. 403–417.
- Masten, S. E., *Empirical research in transaction-cost economics: Challenges, progress, directions*, paper for the conference on Transaction Cost Economics and Beyond (Rotterdam: Erasmus University, 1994).
- Monteverde, K. and Teece, D. J., Appropriable rents and quasi-vertical integration, *Journal of Law and Economics* (1982), pp. 321–328.
- Mulherin, J. H., Complexity in long-term contracts: An analysis of natural gas contractual provisions, *Journal of Law, Economics, and Organization* (1986), pp. 105–117.
- Noorderhaven, N. G., The problem of contract enforcement in economic organization theory, *Organization Studies* (1992), pp. 229–243.
- Noorderhaven, N. G., Transaction cost analysis and the explanation of hybrid vertical inter-firm relations, *Review of Political Economy* (1994), pp. 19–36.
- Noorderhaven, N. G., The argumentational texture of transaction cost economics, forthcoming in *Organization Studies* (1995).
- Nooteboom, B., An analysis of specificity in transaction cost economics, *Organization Studies* (1993), pp. 443–451.
- Nooteboom, B., Transactions and networks: Do they connect? Forthcoming in: J. Groenewegen (Ed.), *Dynamics of the Firm: Strategies of Pricing and Organisation* (Aldershot: Edward Elgar, 1994).
- Palay, Th. M., Comparative institutional economics: The governance of rail freight contracting, *Journal of Legal Studies* (1984), pp. 265–287.
- Powell, W. W., Neither market nor hierarchy: Network forms of organization, *Research in Organizational Behavior* (1987), pp. 295–336.
- Ring, P. S. and van de Ven, A. H., Structuring cooperative relationships between organizations, *Strategic Management Journal* (1992), pp. 483–498.
- Ring, P. S. and van de Ven, A. H., Developmental processes of cooperative interorganizational relationships, *Academy of Management Review* (1994), pp. 90–118.
- Semlinger, K., New developments in subcontracting: Mixing market and hierarchy. In: A. Amin and M. Dietrich (Eds), *Towards a New Europe? Structural Change in the European Economy* (Aldershot: Edward Elgar, 1991), pp. 96–115.
- Williamson, O. E., *Markets and Hierarchies* (New York: Free Press, 1975).
- Williamson, O. E., Transaction cost economics: The governance of contractual relations, *Journal of Law and Economics* (1979), pp. 3–61.
- Williamson, O. E., Credible commitments: Using hostages to support exchange, *American Economic Review* (1983), pp. 519–540.
- Williamson, O. E., *The Economic Institutions of Capitalism; Firms, Markets, Relational Contracting* (New York: Free Press, 1985).
- Williamson, O. E., Comparative economic organization: The analysis of discrete structural alternatives, *Administrative Science Quarterly* (1991a), pp. 269–296.
- Williamson, O. E., Economic institutions: Spontaneous and intentional governance, *Journal of Law, Economics, and Organization* (1991b) (special issue), pp. 159–187.
- Woodside, A. G. and Möller, K., Middle range theories of industrial purchasing strategies, *Advances in Marketing and Purchasing* (1992), pp. 21–59.